

DEPARTMENT OF THE INTERIOR
CANADA

HON. W. J. ROCHER, Minister. W. W. CORY, C.M.G., Deputy Minister.

PUBLICATIONS
OF THE
Dominion Observatory

OTTAWA

W. F. KING, C.M.G., LL.D., *Director.*

Vol. I, No. 2

Precise Levels

BY

DOUGLAS H. NELLES, D.L.S.

OTTAWA

GOVERNMENT PRINTING BUREAU
1913

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PO1-02

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16230



PRECISE LEVELS ALONG DAWSON AND GLACIER ROADS

FROM WHITE PASS B.C., TO THE 141ST MERIDIAN.

1908-1910.

BY DOUGLAS H. NELLES, D.L.S.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
43 R.	0.0000	2,912.3462	On rock at base of bronze boundary monument at White Pass.
P. 42 R.	0.0411	2,887.3653	Bronze tablet cemented in rock on the east side of track about 30 feet north of station shed.
41 R.	1.0888	2,902.9253	On granite rock on west side of track, 0.2 miles south of mile post 22.
40 R.	3.3015	2,938.6636	On granite rock on west side of track, 0.72 miles south of mile post 23.
39 R.	6.3676	2,783.7576	On first iron bolt from the south end of the west guard-rail of bridge 26-A.
38 R.	9.7907	2,759.2187	On granite rock on west side of track, 0.18 miles north from mile post 30.
P. 37 R.	12.0958	2,899.4857	Bronze tablet cemented in granite rock on east side of track, 0.51 miles south from mile post 32.
36 R.	12.9203	2,902.1036	On granite rock on west side of track, 0.28 miles north from mile post 33 and 0.6 miles north of Log Cabin station.
35 R.	14.6227	2,798.6446	On granite rock on west side of track, 0.03 miles north from mile post 35.
34 R.	16.7584	2,493.9616	On the second iron guard-rail bolt from the north end and on the west side of bridge 37-A.
33 R.	19.0579	2,261.9025	On granite rock on west side of track, 0.47 miles south of mile post 40.
P. 32 R.	20.2109	2,158.3760	On bronze tablet cemented in granite rock on east side of track near switch, 10 rail lengths north of Bennett station.
31 R.	20.9794	2,157.9825	On granite rock on east side of track, 0.52 miles north from mile post 41.
30 R.	24.1324	2,158.0276	On granite rock on east side of track, 0.52 miles south from mile post 44.
29 R.	25.6577	2,157.9244	On granite rock on west side of rock cut, 0.12 miles south from mile post 46.
28 R.	28.1251	2,162.0094	On rock on east side of rock cut, 0.54 miles south of mile post 48.

P. denotes that the bench mark is a bronze tablet or an iron post.

R. denotes that the bench mark so lettered is on or near the White Pass and Yukon Railroad right of way.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
27 R.	30-1640	2,157-5706	On rock on east side of rock cut, 0-58 miles south of mile post 50.
P. 26 R.	31-4556	2,159-0296	On tablet cemented in rock on the west side of the first rock cut north of Pennington section house and 0-3 miles north of Pennington.
25 R.	33-1206	2,191-5756	On copper nail in root of 8-inch pine stump 40 ft. east of track and 0-55 miles south of mile post 53.
24 R.	35-2315	2,173-0199	On copper nail in root of the pine stump on the top of which is the W. P. and Y. Ry. B. M. No. 7908, on the west side of the track and about 120 ft. south from bridge 55-A.
23 R.	36-0779	2,164-3906	On nail in wooden stake on west side of track, 0-53 miles south from mile post 56.
22 R.	37-1158	2,169-8794	On top of the south bolt in the east guard-rail on bridge No. 57-A.
21 R.	39-7591	2,159-0244	On copper nail in root of 10-in. spruce stump about 10 ft. to the east of track and 0-15 miles north of mile post 60.
20 R.	42-0462	2,160-4517	On copper nail in top of 3-in. spruce stump 10 ft. east of track and 0-39 miles south of mile post 62.
19 R.	45-4913	2,161-5724	On point of rock in side of small rock cut about 380 ft. south from mile post 64.
P. 18 R.	47-2279	2,171-3235	Iron post about 100 ft. east of track on sand ridge, 0-67 miles south from mile post 67 and 0-2 miles north of Cariboo.
17 R.	48-4974	2,219-5503	On copper nail in root of 4-in. pine stump 40 ft. west of track and 0-96 miles south from mile post 68.
16 R.	50-9036	2,235-6508	On copper nail in root of 15-in. spruce stump about 20 ft. west of track and 0-29 miles south from mile post 71.
15 R.	54-0769	2,342-7486	On iron spike in side of spare rail post 0-47 miles south of mile post 74.
P. 14 R.	58-9218	2,353-7388	At Lorne. Iron post about 7 rail lengths south of Lorne section house and 150 ft. west of track.
13 R.	61-7806	2,422-7699	On second iron bolt in the east wooden guard-rail on the first bridge south of Minto station.
12 R.	63-5889	2,440-6499	On iron spike in side of spare rail post at Dewette siding and opposite mile post 84.
11 R.	67-0069	2,454-2936	On copper nail in root of pine stump 100 ft. east of track and opposite north end of small lake and 0-44 miles south from mile post 87.
10 R.	69-5515	2,495-1469	On copper nail in top of pine stump 30 ft. on east side of track, 3,163 ft. south from mile post 90 and 1-0 miles north of Robinson.
9 R.	71-0545	2,494-4170	On copper nail in top of pine stump 15 feet east of track and 2,490 ft. south from mile post 92.
8 R.	74-0154	2,465-8065	On copper nail in side of spruce stump about 15 ft. on east side of track just before entering the cut from the lake.
P. 7 R.	75-6316	2,516-6190	Iron post 55 ft. east of mile post 96, reference B.M. A. 7 R., 10 ft. north and B. 7 R., 10 ft. northeast, and 0-9 miles north of Cowley.
6 R.	77-8679	2,509-3953	On copper nail in root of spruce stump on west side of track.
5 R.	80-2441	2,486-7914	On bridge spike in side of emergency rail post 30 ft. south of mile post 100.
4 R.	82-6481	2,410-1549	On copper nail in top of a spruce stump 57 paces southeast from mile post 103 and about 10 ft. from wagon road.
3 R.	83-2455	2,401-7305	On copper nail in root of spruce stump 50 ft. west of track and 200 ft. from the corner of McRae station.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
2 R.	85-3751	2,366-8707	On copper nail in top of spruce stump 120 ft. east of the track just where the wagon road crosses the track at the south end of Miles canyon.
1 R.	87-9560	2,198-4538	On copper nail in top of wooden stake in the ditch of a large cut. This B.M. is likely to be destroyed soon.
P. 1	89-250	2,008-6257	Iron post with bronze cap set in the ground with 3½ ft. below and ½ ft. above. Distant 1.12 miles south along track from Whitehorse station. Situated 20 ft. west of track on flat ground just south of high clay cut-bank.
2	90-3654	2,083-8470	On railroad spike driven into a telegraph post 34 ft. south of Whitehorse station.
3	90-7520	2,081-3685	At Whitehorse. On copper nail in root of pine stump 8 in. diameter, 93 ft. from north corner of a sheet-iron barn and 86 ft. from south corner.
4	92-0505	2,186-5361	On copper nail in root of a spruce tree on right side of road about 179 ft. from junction of cut-off road on first large hill out of Whitehorse.
5	92-9251	2,326-4825	On copper nail in root of 8 in. pine stump on left side of road, 981 ft. north from a square post marked A. J. McPherson, No. 20, October 4, 1903.
P. 6	94-4590	2,404-5705	Bronze tablet cemented in granite boulder, just on top of hill on north side of Mackinton creek on left side of road.
8	97-4463	2,358-2917	On copper nail in root of 6 in. pine tree 1,392 ft. south of mile post marked 146 miles to Yukon Crossing.
9	98-1912	2,266-5708	On copper nail in top of pine stump 670 ft. north from Yukon Crossing mile post 144, about 30 ft. west from road.
10	99-1694	2,209-0201	On copper nail in root of spruce stump 15 ft. from edge of bridge over small stream and 813 ft. north from mile post 8.
11	100-6265	2,331-1958	On copper nail in root of 5-in. pine stump 4 ft. east of road and 145 paces north of Ninemile road house.
12	102-3928	2,455-4005	On copper nail in root of 5-in. pine stump on west side of road and 1,645 ft. north from mile post 11.
13	103-9405	2,452-1265	On wire nail in top of 4-in. poplar stump on east side of road, 1,500 ft. north from road post 1,018 and 2,350 ft. north from mile post 12.
14	105-5122	2,510-9053	On copper nail in root of pine tree on west side of road and distant north 1,225 ft. from road post 1,002 and 2,385 ft. north from Yukon Crossing post 137.
15	107-6718	2,512-8098	On copper nail in root of spruce stump on west side of road and on winter trail north 4,080 ft. from mile post 16.
P. 16	108-0371	2,496-5188	On bronze tablet cemented in granite rock 27 paces south from mile post 17.
17	108-4068	2,479-3104	On wire nail in top of small spruce stump 1,888 ft. north from mile post 17.
18	110-1170	2,334-8159	On copper nail in root of spruce stump on right side of road, south 4,380 ft. from mile post 20 and 400 ft. south from angle post 964.
19	111-6200	2,302-7894	On copper nail in root of dead spruce tree on left side of road, north 3,578 ft. from mile post 20 and 448 ft. north from road post 955.
P. 20	113-0052	2,105-1759	On iron pipe set in center of clump of spruce trees and distant 87 ft. from the northwest corner of the R.N.W.M.P. barracks and 81 ft. from the southwest corner of the stable and 70 ft. from Takhini river.
P. 21	113-0975	2,105-4670	At Takhini, on iron pipe just opposite the ferry landing on north side of the Takhini river about 80 ft. from the water.
22	113-6585	2,167-3140	On wire nail in wooden stake driven in ground 19 ft. north from blaze on pine tree on west side of road and north 424 ft. from road post 941.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
23	114.5910	2,172.0955	On copper nail in top of poplar stump on the side hill to the east of the road and north 3,388 ft. from mile post 23 and 588 ft. north from road post 936.
24	116.0661	2,281.6295	On copper nail in root of spruce tree on east side of road, 512 ft. north from mile post 25.
25	117.3842	2,437.2635	On copper nail in side of poplar stump on east side of road, north 2,291 ft. from mile post 26 and 311 ft. north from road post 912.
26	118.6544	2,368.1970	On copper nail in top of poplar stump on west side of road, south 1,775 ft. from Yukon Crossing mile post 123 near Sixmile creek.
27	120.5784	2,283.6088	On copper nail in root of poplar tree on east side of road, north 3,363 ft. from mile post 29 and 2,130 ft. north from road post 889.
28	122.7563	2,144.9678	On copper nail in top of poplar stump on east side of the road, north 4,355 ft. from mile post 31 and 695 ft. north from road post 877.
29	123.8624	2,152.1062	On copper nail in root of spruce stump on east side of road and distant 550 ft. south from mile post 33.
P. 30	125.9920	2,158.8262	Iron post on west side of road and about 40 ft. south from Little River bridge.
31	128.2358	2,218.3199	On copper nail in root of spruce tree on west side of road, north 1,450 ft. from mile post 37 and 723 ft. north from road post 843 and Yukon Crossing mile post 114.
32	129.3866	2,225.1699	On copper nail in root of spruce tree on west side of road, north 1,549 ft. from Yukon Crossing mile post 113 and 639 ft. north from road post 856.
33	131.0099	2,278.3829	On copper nail in root of 8-in. pine stump on right side of road and at junction of summer and winter trails and distant 208 ft. north from mile post 40.
34	132.1843	2,309.8972	On copper nail in root of 8-in. pine stump on west side of road, north 109 paces from Yukon Crossing mile post and about $\frac{1}{2}$ mile north of Little River road house.
P. 34	2,311.3592	Iron post put in in October, 12 ft. from B.M. 34.
35	134.1282	2,519.7997	On copper nail in top of 6-in. pine stump on west side of road, distant 733 ft. north from road post 735.
36	135.3592	2,781.1692	On copper nail in top of 6-in. pine stump on west side of road, south 220 ft. from mile post 44.
37	136.8090	2,794.6887	On copper nail in root of pine stump 2,230 ft. north from mile post 45 and 650 ft. north from road post 754.
38	138.8978	2,843.4487	On copper nail in root of 10-in. pine stump on right side of road, 2,710 ft. north from mile post 47 and 230 ft. north from road post 742.
39	139.6994	2,757.6237	On copper nail in top of poplar stump on east side of road, 610 ft. south from road post 736 and 3,260 ft. south from mile post 49.
40	141.8721	2,752.5452	On wire nail in top of pine stump on west side of road, 3,016 ft. north from mile post 50 and 606 ft. north from road post 718.
P. 41	144.5416	2,736.6494	Iron post on west side of road and about 60 paces from a creek which is the source of the middle fork of the Nordenskiöld river.
42	146.8293	2,737.8621	On copper nail in root of spruce tree on east side of road, 1,861 ft. north from mile post 53 and 1,251 ft. north from road post 689.
43	147.9459	2,709.2796	On copper nail in top of 4-in. poplar stump on the west side of road, 2,595 ft. north from mile post 56 and 774 ft. north from road post 683.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
44	149.9726	2,733.4811	On copper nail in root of 4-in. spruce stump on east side of road, 2,518 ft. north from Yukon Crossing mile post 93 and 1,463 ft. north from road post 669.
45	151.0573	2,667.5235	On copper nail in root of spruce tree on west side of road, south 2,830 ft. from Yukon Crossing mile post 91 and south 600 ft. from road post 656 and south 400 ft. from junction of old and new roads.
46	153.7187	2,658.6875	On copper nail in root of 8-in. spruce tree on right side of road, north 888 ft. from Yukon Crossing mile post 89 and 388 ft. north from road post 644.
P. 47	154.4364	2,626.4279	At Nordenskiöld, on bronze tablet cemented in granite boulder 99 ft. from the southeast corner of Nordenskiöld road house and 99.5 ft. northerly from northwest corner of Police shack, marked 47 in red paint on boulder.
48	155.9153	2,568.5004	On copper nail in root of 16 in. forked spruce tree on right side of road, north 1,080 ft. from mile post 64 and 555 ft. north from angle post 628.
49	158.6676	2,519.2919	On wire nail in root of 8-in. spruce stump on west side of road, north 7 ft. from mile post 67 and 362 ft. north from road post 609 and 362 ft. north from Y. C. mile post 84.
50	161.1731	2,456.0774	On copper nail in root of spruce tree on east side of road, 2,610 ft. north from mile post 69 and 745 ft. north from road post 586.
51	162.1917	2,448.2224	On copper nail in root of spruce stump on west side of road, 40 ft. north from road post 581 and 2,530 ft. south from mile post 71.
P. 52	163.7594	2,418.8654	Iron post on west side of road 82 paces north from mile post 72 and 83 paces north from road post 574.
53	165.3881	2,443.6959	On copper nail in root of 3-in. spruce tree on left side of road and about 50 ft. from it, and north 3,570 ft. from mile post 73 and 160 ft. north from road post 562.
54	168.4781	2,396.7604	On copper nail in root of spruce tree on east side of road, north 3,745 ft. from the 76 mile post and north 680 ft. from road post 546 and north 2,127 ft. from the bridge over the Nordenskiöld river.
55	171.5226	2,324.8029	On copper nail in root of 10-in. poplar tree on east side of road, 3,825 ft. north from mile post 79 and 930 ft. north from road post 532.
56	173.2520	2,307.3819	On copper nail in root of 18-in. spruce tree on east side of road, 2,270 ft. north from mile post 81 and 280 ft. north from road post 520.
P. 57	176.1764	2,247.7629	At Braeburn. Iron post 4 ft. from the southwest corner of the middle building of the R. N. W. M. Police buildings.
58	176.8219	2,228.3319	On copper nail in root of 10-in. poplar tree 60 ft. on right side of road, 100 ft. south from 85 mile post and 325 ft. north from angle post 506.
59	180.1319	2,172.7274	On copper nail in root of 12-in. dead spruce tree on left hand side of the road, north 1,380 ft. from the 88 mile post and 15 ft. south from angle post 487.
60	182.9213	2,174.3564	On copper nail in root of 16-in. spruce tree on left side of road, 125 ft. north from 91 mile post and 100 ft. north from angle post 466.
61	184.8033	2,173.0859	On copper nail in root of 4-in. poplar on right side of road, 40 ft. south of Yukon Crossing mile post 58 and 260 ft. north from angle post 453.
62	185.8143	2,117.1254	On copper nail in top of 6-in. spruce stump on left side of road, 960 ft. south from the 94 mile post and 985 ft. south from angle post 443.
P. 63	187.2328	2,103.1918	Iron post 31 paces south from the southeast corner of an abandoned road house and 1 pace north of angle post 434 on right side of the road.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
64	188-5837	2,096-5524	On copper nail in root of 6-in. spruce tree on left side of road, 3,375 ft. north from the 96 mile post and 55 ft. north from angle post 415.
65	190-7549	2,065-2739	On copper nail in top of 4-in. poplar stump on left side of road, 4,350 ft. north from the 98 mile post and 1,910 ft. north from angle post 393.
66	193-1986	2,030-3634	On copper nail in top of 6-in. pine stump on right side of road, north 1,125 ft. from the 101 mile post and north 805 ft. from angle post 386.
67	195-9777	1,963-2670	On copper nail in top of 5-in. poplar stump on left side of road, 142 ft. south from the 104 mile post and 955 ft. south from Yukon Crossing post 47, and 4,400 ft. south from angle post 378.
68	198-0821	1,942-9090	On copper nail in top of 6-in. poplar stump on left side of road, 520 ft. north from the 106 mile post and 220 ft. south from angle post 373.
P. 69	198-4120	1,938-6635	Iron post 3 ft. from southwest corner of R.N.W.M. Police barracks at Montague
70	200-3825	2,008-4525	On copper nail in root of 8-in. spruce stump in clump of tall timber on east side of old road, 1,810 ft. north from the 108 mile post and 805 ft. north from angle post 363.
71	203-2540	1,902-2650	On copper nail in top of 5-in. pine stump on west side of road, 895 ft. north from the 111 mile post, and 165 ft. north from angle post 346.
72	205-7180	1,933-7435	On copper nail in root of 10-in. spruce stump on east side of road, 8,455 ft. north along road from mile post 112 and 2,170 ft. north from angle post 329 and 25 ft. south from bridge over small stream.
73	206-8933	1,936-6815	On copper nail in top of 5-in. poplar stump on west side of road, 1,605 ft. south from the 115 mile post and 580 ft. south from angle post 311.
74	209-0370	1,864-0115	On copper nail in root of 6-in. spruce stump on east side of road, 4,420 ft. north from Yukon Crossing mile post 35 and 770 ft. north from angle post 295.
75	211-1063	1,881-8865	On copper nail in top of 4-in. spruce stump on east side of road, 4,690 ft. north from the 118 mile post and 1,130 ft. north from angle post 277.
P. 76	211-5198	1,912-4475	Iron post on east side of road in open glade 500 ft. from stream and 1,778 ft. north from mile post 119 and 863 ft. north from angle post 273.
77	214-3562	1,864-0090	On copper nail in top of 5-in. poplar stump on west side of road, 545 ft. north from the 122 mile post and 665 ft. north from angle post 248. N.B.—The copper nail has since been driven down about one-tenth of a foot by some person.
78	217-1135	1,837-0175	On copper nail in top of 6-in. spruce stump on west side of road, 4,390 ft. north from the 124 mile post and 95 ft. south from angle post 223.
79	218-8703	1,910-7375	On copper nail in top of 4-in. spruce stump 3,030 ft. north from the 126 mile post and 1,770 ft. north from angle post 212.
80	221-1034	1,778-4500	On copper nail in top of 4-in. spruce stump on east side of road, 3,460 ft. north along road from Yukon Crossing mile post 213 and 260 ft. north from angle post 189.
81	222-0420	1,722-3370	On copper nail in top of 4-in. poplar stump on west side of road, 1,325 ft. west from cement pier in front of Tantalus Police barracks and 270 ft. north from angle post 180.
P. 82	222-2950	1,718-3340	On bronze tablet cemented in top of concrete pier built by McDiarmid in 1907 and used as an astronomical station.
83	224-1768	1,753-5690	On copper nail in top of 5-in. spruce stump on east side of road, 2,020 ft. north of Yukon Crossing mile post 20 and 920 ft. north from angle post 166.

No. of B. M.	Distance from White Pass	Elevation above Mean Sea Level	Description of Bench Mark
	Miles	Feet	
84	226-4604	1,824-1125	On copper nail in root of 5-in. spruce tree on west side of road, 3,565 ft north from Yukon Crossing mile post 18 and 1,180 ft. north from angle post 152
85	227-4404	1,888-6055	On copper nail in top of 4-in. spruce stump on east side of road, 3,060 ft north from Yukon Crossing mile post 17 and 1,470 ft. north from road post 138
86	228-9701	1,745-6300	On copper nail in top of 4-in. poplar stump on east side of road, 505 ft north from Yukon Crossing mile post 15 and 115 ft. north from angle post 125
87	229-9519	1,742-3795	On copper nail in top of 4-in. poplar stump on west side of new road or west branch, 1,915 ft. north from junction of the old and new roads.
P 88	230-9051	1,748-8415	Iron post set 3½ ft. in gravel on west side of road, on top of a hill rising from a small lake and distant 2,982 ft. north from angle post 106
89	232-1242	1,719-9988	On wire nail in 2-in. poplar stump on west side of road, 2,709 ft. north of Yukon Crossing mile post 12
90	234-0827	1,958-9643	On copper nail in top of 6-in. poplar stump on west side of road, 2,272 ft north of Yukon Crossing mile post 10
91	236-7502	1,925-9026	On copper nail in top of 3-in. poplar stump on west side of road, 4,947 ft. north of Yukon Crossing mile post 9.
92	239-0561	1,818-4931	On copper nail in root of 8-in. poplar stump on east side of road just on top of 50 ft. hill and 7,159 ft. north of Yukon Crossing mile post 6.
93	241-4811	1,683-5311	On copper nail in root of 8-in. spruce stump on east side of road, 12,536 ft north of Yukon Crossing mile post 5.
P 94	244-1400	1,597-4446	At Yukon Crossing. Iron post placed in garden of road house, about 75 ft. north of house and 70 ft. from high water mark of river
P 95	244-3344	1,613-2151	Iron post on north side of river, 150 ft. distant from high water mark and 3 ft. north of road post marked 45 miles +2,200 ft. from Pelly river.
96	246-4040	1,814-5756	On copper nail in top of poplar stump on east side of road in a little ravine near the top of the big hill and 3,520 ft. north of Pelly river mile post 44
97	248-3991	1,838-9691	On copper nail in top of poplar stump on west side of road, 7,478 ft. north of Pelly river mile post 42.
98	249-7687	1,784-7407	On copper nail in top of poplar stump on west side of road, 105 ft. north of McGregor creek and 2,055 ft. north of Pelly river mile post 41
99	251-4302	1,768-1108	On copper nail in top of poplar stump on east side of road, about 1,614 ft north from Pelly river mile post 39
100	254-1393	1,713-2483	On copper nail in root of spruce stump on east side of road, 1,387 ft. north of Pelly river mile post 36.
101	256-7020	1,632-1047	On copper nail in top of poplar stump on west side of road, 8,128 ft. north of Pelly river mile post 34.
102	259-0546	1,648-4017	On copper nail in top of poplar stump on east side of road, 320 ft. north of Pelly river mile post 31
103	260-1322	1,646-0401	On copper nail in top of 3-in. poplar stump on east side of road, 730 ft. north of Pelly river mile post 30.
104	262-6813	1,548-9341	On copper nail in root of 12-in. poplar tree on west side of road, 3,600 ft north of Pelly river mile post 28.
105	265-5339	1,516-5621	On copper nail in root of 10-in. spruce stump on east side of road, on the north end of a little dip in the road and 2,815 ft. north of Pelly river mile post 25.

No. of B. M.	Distance from White Pass	Elevation above Mean Sea Level	Description of Bench Mark
	Miles	Feet	
P. 106	267.0194	1,520.7652	At Minto. Iron post placed in the northwest corner of the fence in front of the R.N.W.M. Police barracks, 700 ft. north of Pelly river mile post 25.
107	268.1217	1,535.6573	On copper nail in top of poplar stump 40 ft. west of road just at the beginning of the hill over Minto bluff and 672 ft. north of Pelly river mile post 22.
108	269.4990	1,700.8843	On copper nail in top of poplar stump 15 ft. west of road and 2,714 ft. north of Pelly river mile post 21.
109	271.3653	1,501.7493	On copper nail in top of 3-in. poplar stump on west side of road, 10 ft. from river near north end of cut bank, and 1,713 ft. north from Pelly river mile post 19.
110	272.6307	1,504.1963	On copper nail in root of 6-in. poplar stump on west side of road, 3,441 ft. north of Pelly river mile post 18.
111	275.2215	1,494.0903	On copper nail in top of 4-in. spruce stump on west side of road, 1,176 ft. north of Pelly river mile post 15.
P. 112	276.0354	1,491.7288	Iron post 30 ft. on west side of road, 79 ft. north of mile post 14 and 2,614 ft. north of Carpenter's road house.
113	279.5678	1,478.8298	On copper nail in top of 4-in. poplar stump on west side of road, 3,007 ft. north of mile post 11.
114	282.3884	1,508.1788	On copper nail in top of poplar stump on west side of road, 2,094 ft. north from mile post 8.
115	284.8397	1,635.0208	On copper nail in top of 3-in. poplar stump on west side of road, 4,397 ft. north from mile post 6.
116	285.9988	1,564.5938	On copper nail in top of poplar stump on west side of road, 5,163 ft. north from Pelly river mile post 5.
117	286.8462	1,424.9868	On copper nail in top of spruce stump on east side of road at top of 4 mile hill out from Pelly and 4,270 ft. north of Pelly river mile post 4.
P. 118	290.0250	1,427.5308	At Pelly river. Iron post set on south bank of river 11 paces from the edge, and 48 paces from the front door of road house.
P. 119	290.4048	1,432.6153	Iron post on north side of road just opposite road house and about 30 ft. back from the little hill where the road rises from near the river level to about ten feet above.
120	292.5074	1,626.4474	On copper nail in top of poplar stump on east side of road, 158 ft. north from mile post 52.
121	293.7543	1,842.0538	On copper nail in top of spruce stump on west side of road, 1,463 ft. north of mile post 53.
122	294.1431	1,924.4523	On copper nail in top of spruce stump on east side of road, 3,515 ft. north from mile post 53.
123	295.6970	2,143.2477	On copper nail in top of spruce stump on west side of road, 1,229 ft. north from mile post 51.
124	297.6787	2,237.5478	On copper nail in top of poplar stump on east side of road; 950 ft. north from mile post 49.
125	299.8737	2,105.7927	On volcanic rock on west side of road, 1,929 ft. north from mile post 47.
126	300.1355	2,094.3635	On copper nail in top of spruce stump on east side of road just behind angle post 398 and 3,311 ft. north from mile post 47.
127	301.0612	2,126.6811	On copper nail in top of poplar stump on east side of road, 2,920 ft. north of mile post 46.
P. 128	301.1887	2,108.1352	Iron post on east side of road just south of marshy flat and 3,593 ft. north of mile post 46.
129	302.6642	2,260.4229	On copper nail in top of spruce stump on east side of road, 834 ft. north of mile post 44.

No. of B. M.	Distance from White Pass		Elevation above Mean Sea Level	Description of Bench Mark
	Miles	Feet		
130	304-6677	2,318-9869	On copper nail in top of wooden stake driven in the ground on the east side of road, 148 ft. north of mile post 42	
131	306-2235	2,403-0909	On copper nail in top of birch stump on east side of road, 3,236 ft. north from mile post 41	
P. 132	309-5069	2,261-0915	At Humes. Iron post 10 ft. north of mile post 37 and 184 paces south from Humes, or what is now called Clark's road house.	
133	309-7407	2,229-9773	On copper nail in root of birch stump on west side of road, 84 paces north from the road house. This was wrongly marked 134	
134	311-3476	2,143-9588	On copper nail in top of spruce stump on west side of road, 4,208 ft. north from mile post 36. Wrongly marked 135.	
135	314-2683	2,030-8460	On copper nail in root of spruce stump on west side of road, 3,789 ft. north from mile post 33.	
136	315-4328	1,976-7919	On copper nail in top of poplar stump on east side of road, 84 paces southeast from the southeast corner of the Grand Valley Police barracks	
137	315-8336	2,142-5404	On copper nail in top of willow stump on west side of road, 1,103 ft. north from mile post 31	
138	317-4178	2,760-9672	On copper nail in top of poplar stump on west side of road, 4,047 ft. north from mile post 30.	
139	317-8144	2,882-1241	On copper nail in top of poplar stump on east side of road on the highest elevation of Grand Valley summit, 675 feet north from mile post 29	
140	319-1829	2,653-9202	On copper nail in top of poplar stump on west side of road, 2,332 ft. north from mile post 28	
141	320-1746	2,411-6857	On copper nail in top of spruce stump on east side of road, 2,708 ft. north from mile post 27.	
142	320-8617	2,132-0972	On copper nail in top of spruce stump on west side of road, on bank of creek, 1,008 ft. north from mile post 26	
P. 143	321-8707	2,296-8887	Iron post on east side of road, 38 paces from bridge across creek beside which is a trapper's old shack, and 970 ft. north of mile post 25.	
144	322-4789	2,522-8142	On copper nail in top of spruce stump on west side of road, 4,181 ft. north of mile post 25.	
145	324-4576	2,715-1658	On copper nail in top of spruce stump on west side of road, 4,054 ft. north from mile post 23.	
146	325-9205	2,664-7748	On copper nail in top of wooden stake on west side of road, 1,272 ft. north from mile post 21.	
147	327-3380	2,423-8783	On copper nail in top of old spruce stump on east side of winter road, 3,465 ft. north from mile post 20.	
P. 148	328-1046	2,240-6638	At Stevens. Iron post on east side of road, about 50 paces northerly from the N. E. corner of road house and 2,232 ft. north from mile post 19.	
149	329-2185	2,284-0468	On copper nail in top of stake on the west side of road, 2,852 ft. north from mile post 18.	
150	330-7420	2,067-2453	On copper nail in top of old spruce stump, 351 ft. north of mile post 16.	
151	332-6298	1,967-3768	On copper nail in root of old spruce stump on east side of road, 5,047 ft. north from mile post 15.	
152	333-3836	1,889-3419	On copper nail in top of poplar stump on west side of road, 3,731 ft. north from mile post 14.	
153	334-0346	1,574-0639	On copper nail in top of spruce stump on west side of road, 39 paces from north end of bridge over a creek and 1,494 ft. north from mile post 13.	
154	335-7565	1,640-4524	On copper nail in top of birch stump on west side of road, 5 ft. from mile post 11.	

No. of B. M.	Distance from White Pass	Elevation above Mean Sea Level	Description of Bench Mark
	Miles	Feet	
P. 155	337-0130	1,467-5219	Iron post 14 paces east of bridge over Rosebud creek and 7 paces south from creek bank
156	338-4166	1,837-8519	On copper nail in top of poplar stump on west side of road, 3,070 ft north from mile post 9
157	339-7744	2,386-1149	On copper nail in top of spruce stump on west side of road on the top of Rosebud summit and 4,942 ft. north from mile post 8
158	341-4183	2,143-4519	On copper nail in top of poplar stump on east side of road, 8,294 ft north of mile post 7
159	343-1352	1,881-8269	On copper nail in root of spruce stump on east side of road, 6,861 ft. north from mile post 5
160	344-3240	1,699-2394	On copper nail in top of poplar stump on east side of road, 2,500 ft. north from mile post 3
161	345-7185	1,362-0429	On copper nail in root of old spruce stump on east side of road, 4,515 ft. north from mile post 2
P. 162	346-7164	1,286-6361	Iron post on west side of road at the junction of old and new roads on south side of Stewart river
P. 163	347-5429	1,285-3924	Iron post on west side of road and inside of Mrs. Stewart's fence, about 75 paces northerly from road house, and 150 yards north of Stewart Crossing
164	349-5685	1,413-5344	On copper nail in top of spruce stump on west side of road, 1,080 ft. north from mile post 2
165	351-7244	1,462-6248	On copper nail in top of spruce stump on west side of road just before it takes a semi-circular turn to the west and 2,218 ft. north from mile post 4
166	353-6806	1,596-9163	On copper nail in top of spruce stump on east side of road, 2 ft. behind a spruce tree blazed and marked 6½ miles from Stewart Crossing
167	354-9413	1,716-9337	On copper nail in top of poplar stump on west side of road, 3,359 ft north from mile post 7
168	356-8079	1,847-0397	On copper nail in top of old spruce stump, cut off close to the ground, on east side of road marked by blaze on tree, 2,763 ft. north from mile post 9
P. 169	358-5010	2,103-3406	Iron post on east side of road about 100 ft. south of small stream and 1,075 ft. north of mile post 11
170	359-6205	2,210-5192	On copper nail in top of spruce stump on west side of road, 1,052 ft. north from mile post 12.
171	361-6017	2,493-8386	On copper nail in top of old spruce stump on west side of road, 6,059 ft. north of mile post 14
172	362-9231	2,934-1737	On copper nail in top of old spruce stump on west side of road, north of McCarthy's deserted road house and 4,426 ft. north of mile post 15.
173	363-8419	3,268-2108	On copper nail in top of old spruce stump on east side of road, 60 ft. south of mile post 17, and 0.7 miles south of Wounded Moose summit.
174	365-6595	3,204-1614	On copper nail in top of spruce stump on west side of road, 422 ft north of Eureka mile post 15
175	366-5128	2,960-1349	On copper nail in top of spruce stump on west side of road, 351 ft south of Eureka mile post 14
176	367-6622	2,646-5290	On copper nail in top of spruce stump on east side of road, 135 ft. north of Eureka mile post 13
177	368-3020	2,513-2275	On copper nail in top of spruce stump on east side of road, 2,708 ft. north of Stewart mile post 21
178	371-0354	2,226-7445	On copper nail in top of poplar stump on west side of road, 110 ft. north of Eureka mile post 10

No. of B. M.	Distance from White Pass	Elevation above Mean Sea Level	Description of Bench Mark
	Miles	Feet.	
P. 179	372-1970	2,013-3512	At Wounded Moose. Iron post on east side of Eureka road, about 40 ft. north of Wounded Moose creek
180	372-9901	2,171-4687	On copper nail in top of spruce stump on west side of road and right opposite to Eureka mile post 8
181	374-0780	2,483-1512	On copper nail in top of spruce stump on west side of road, 543 ft. north of Eureka mile post 7
182	375-1936	2,956-7952	On copper nail in top of poplar stump about 60 ft. west of road. A tree is blazed near the road and an arrow pointing towards the B.M. is painted on it. 1,209 ft. north from Eureka mile post 6.
183	376-0369	3,194-7469	On copper nail in top of wooden stake on west side of road beside a blazed stump marked 183, 339 ft. north from Eureka mile post 5.
184	378-2807	3-073-6322	On copper nail in top of spruce stump on east side of road, 12,180 ft. north from mile post 5.
185	379-4592	2,523-6148	On copper nail in top of spruce stump on west side of road, 2,770 ft. north of mile post 2
186	380-8748	1,905-5313	On copper nail in top of spruce stump on west side of road and near the first shack south of Eureka creek bridge
P. 187	381-0730	1,906-1397	At Eureka. Iron post 10 paces northerly from the N.W. end of a long row of horse stables. There are three reference benches nearby, A, B, and C. 'A' is a copper nail in a projecting log at front end of stable; 'B' is on a copper nail in a stump behind the stable; and 'C' is on a copper nail in top of a stump a short distance up the road and behind a road post
198	382-5627	2,491-5257	On copper nail in root of dead spruce stump on west side of road.
199	384-8716	2,217-4637	On copper nail in root of 5-in. birch stump on east side of road, 400 ft. from the junction of Eureka and Old Black Hills trail.
200	387-2329	1,684-3282	On copper nail in top of spruce stump on west side of road
201	387-8166	1,628-3832	On copper nail in top of stake driven in ground at the southeast corner of road house, 0.1 miles north of Montana creek.
P. 201 A	387-8166	1,639-7382	Iron post on west side of road and north of Black Hills road and 30 paces from the northeast corner of road house.
202	389-8061	1,990-1072	On copper nail in root of birch stump on west side of road.
203	390-3460	1,971-5327	On copper nail in root of old spruce stump on west side of road.
204	392-6992	1,747-5209	On copper nail in root of old spruce stump on east side of road.
P. 205	395-3768	1,497-7411	Iron post on west side of road, 34 paces south from the middle of the bridge on Mackinnon creek, and is 1.0 miles south of Indian River road house
206	395-4489	1,488-8102	On copper nail in root of old stump on west side of road, 78 paces from middle of bridge over Mackinnon creek.
207	398-9422	1,564-5464	On copper nail in root of old stump on east side of road, 200 paces from Raceford post office
208	400-8584	1,772-8343	On copper nail in top of wooden stake driven in ground on east side of road at the foot of an old hitching post for horses.
209	403-5421	2,186-4672	On copper nail in root of spruce stump on east side of road.
P. 210	404-9807	2,709-0043	At Calder summit. Iron post set in ground on east side of road, 102 paces east of road house.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
211	405-0740	2,694-5431	On copper nail in root of 3-in. spruce stump on east side of road.
212	407-5012	2,086-3720	On copper nail in top of wooden stake driven in ground on west side of road, 75 ft. from bridge over Chief gulch.
213	409-5911	1,823-9308	On copper nail in top of wooden stake driven in ground on west side of road on claim 31 above, on Eldorado creek.
214	411-4884	1,654-0094	On copper nail in top of wooden stake driven in ground on east side of road.
P. 215	412-6147	1,623-5485	At Grand Forks. Iron post set in ground 326 ft. north along the track from railway station and 27 ft. west of outer rail.
216	412-8406	1,603-1120	On copper nail in root of old stump on east side of track at north end of first rock cut north from the railway station.
217	415-8544	1,426-5947	On copper nail in top of 3-in. wooden stake driven in ground on east side of railway track.
P. 218	417-4333	1,323-7892	On bronze tablet cemented in rock on east side of railway track, 117 ft. south of culvert on claim 47 above, on Bonanza creek.
219	417-4583	1,318-9952	On copper nail in the north mud sill on west side of the culvert on claim 47 below, on Bonanza creek.
220	419-1146	1,234-9117	On copper nail in root of birch stump 50 ft. west of track.
221	422-8515	1,064-6738	On lower west rivet head in the east and south strut post of the Ogilvie bridge.
P. 222	423-9473	1,048-1676	On bronze cap cemented in rock on the north side of road, 278 paces south of the old site of the Klondike bridge.
P. 223	424-4326	1,049-8955	In Dawson. On bronze cap cemented in the astronomical pier behind the Administration Building.
P. 224	425-1859	1,038-2048	On bronze tablet cemented in rock, opposite the ferry landing about two ft. above the road grade.
225	425-9476	1,280-5962	On copper nail in root of spruce stump 20 ft. south of road.
226	426-7835	1,724-5139	On copper nail in root of poplar stump 30 ft. on south side of road.
227	427-5108	1,999-0787	On copper nail in top of wooden stake on north side of road.
228	428-2845	2,406-3819	On copper nail in top of wooden stake on north side of road.
229	429-5434	2,767-9186	On copper nail in root of birch stump on north side of road, halfway up the first steep grade after the road switches over to the south side of the hill.
230	430-6681	3,047-0819	On copper nail in top of wooden stake on north side of road.
P. 231	431-4824	3,253-1480	Iron post 15 ft. to north of road on a high knoll which has often been used as a camping place, and lies in a westerly direction from a lone spruce tree on top of the knoll.
232	431-6886	3,239-3627	On copper nail in top of spruce stump 13 paces north of road.
233	433-8927	3,531-9069	On copper nail in root of spruce stump 30 ft. north of road.
234	435-7368	3,730-0673	On copper nail in top of wooden stake, north side of road on the east side of a hill clear of trees and brush; and is 0.5 miles west of Tenmile road house.

No. of B. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
235	436-5724	3,728-1968	On copper nail in top of a wooden stake on south side of road near a small stream from a snow bank.
236	438-4514	3,651-5816	On copper nail in root of spruce stump on south side of road and at the west end of a flat piece of the road.
P. 237	440-4974	3,635-1994	Iron post on south side of road about 0.4 miles west of what is known as the Fifteenmile spring and 83 paces from an outcrop of rock on south side of road.
238	442-8305	3,715-0145	On copper nail in root of spruce stump 100 ft. to the north of road and about $\frac{1}{2}$ mile west of the Seventeenmile water hole.
239	444-6169	3,733-3322	On copper nail in root of spruce stump 100 ft. north of road, stump cut off 4 ft. high.
240	445-9028	3,677-0870	On copper nail in root of 10-in. old spruce stump on the north edge of the road in horseshoe bend.
P. 241 A.	448-3897	3,533-7966	At Twentyfourmile road house. Iron post set in frozen ground 30 ft. north and 128 paces east of north from the north corner of road house barn.
241	448-3954	3,533-4376	On quartz rock 30 ft. west of P. 241 A.
242	449-3518	3,701-9611	On copper nail driven in top of wooden stake on north side of road.
243	450-7252	3,517-6537	On copper nail in root of 3-in. spruce stump 20 ft. south of road, just past the foot of the second hill out from the road house.
244	452-3295	3,595-9372	On copper nail in root of 5-in. spruce stump, south side of road on the east side of the top of the hill.
245	453-3571	3,533-8872	On copper nail in top of wooden stake 6 ft. from road on south side.
246	455-4624	3,646-1932	On copper nail in top of wooden stake driven in ground on north side of road about halfway up the hill east of the Thirtymile road house.
P. 247	457-6722	3,471-1062	Iron post set in ground on north side of road, 123 paces from the Thirtytwomile spring.
248	458-3803	3,752-6538	On copper nail in top of wooden stake on north side of road just beyond the top of the hill west of the Thirtytwomile spring.
249	460-7981	3,693-6161	On copper nail in top of wooden stake on north side of road about $\frac{1}{4}$ of a mile past old camping place of the road gang.
250	461-8937	3,832-1839	On copper nail in top of wooden stake on north side of road going up Swede Creek Dome and about 50 ft. beyond where a road around the spring snow bank joins the graded road.
251	462-0493	3,788-5785	On copper nail in top of wooden stake on south side of road at the foot of the first steep grade on west side of Swede Creek Dome.
252	463-2114	3,318-2803	On copper nail in root of 4-in. spruce stump on the north side of road near the foot of the second steep grade west of Swede Creek Dome.
P. 253	465-7034	3,153-0470	Iron post 10 ft. to the north side of road, and 0.2 miles east of Fortyone-mile road house.
254	466-8414	3,197-0810	On copper nail driven in root of 5-in. spruce stump, 30 ft. to the north of the road and on the first down grade west from the road house.
255	468-7865	3,217-8365	On copper nail in root of 6-in. spruce stump, 40 ft. to the north of road and near bottom of third up grade from Fortyonemile road house.
256	469-9109	3,185-6985	On copper nail in top of wooden stake on north side of road in bottom of ditch about 40 ft. west of a water hole and 100 ft. in elevation from top of hill.
257	470-4190	3,346-7385	On copper nail in root of 12-in. spruce stump on north side of road, and near the bottom of the third down grade from Fortyonemile road house.

No. of J. M.	Distance from White Pass.	Elevation above Mean Sea Level.	Description of Bench Mark.
	Miles.	Feet.	
258	470-9601	3,377-6605	On copper nail in root of 3-in. spruce stump on north side of road and is in the first clump of green spruce after leaving the top of the hill.
259	473-0192	3,341-0116	On copper nail in root of 4-in. spruce stump 30 ft. to north side of road, and is 21 ft. in elevation lower than the top of the second hill east of Fortyninemile road house.
P. 260	474-9830	3,372-3251	At Fortyninemile road house. Iron post set in ground on north side of road and to east of the road house.
261	476-1693	3,296-5663	On copper nail in root of 6-in. spruce stump on south side of road.
262	478-4206	3,453-3865	On copper nail in root of 8-in. dead spruce stump 40 ft. to the north of road.
263	479-5314	3,164-0665	On copper nail in root of 8-in. dead spruce stump 50 ft. to the north of road.
264	480-7962	2,849-6954	On copper nail in root of 10-in. spruce tree, 3 ft. to the north side of road.
265	481-6147	2,342-7350	On copper nail in root of 4-in. spruce stump 50 ft. south of road and about 200 yards east of Big Gold creek.
P. 266	483-1045	2,679-7319	At Glacier Hill. Iron post set in ground on south side of road at top of first hill east of Glacier road house.
267	484-3363	3,150-1218	On copper nail in root of dead spruce stump 30 ft. south of road.
268	485-4183	3,676-3839	On copper nail in root of 3-in. spruce stump 40 ft. north of road.
269	486-8603	4,000-4076	On copper nail in top of wooden stake halfway between two lone spruce trees one directly above the other, three quarters way around the first gulch to the right of Glacier Dome and at the same elevation as the trail in the divide between the two Domes.
270	488-4777	4,093-6518	On copper nail in top of wooden stake 10 ft. to north side of pack trail going up the first hill after passing the sign board of Poker and Glacier creeks.
271	489-6203	4,245-3684	On top of copper nail driven in wooden stake to west of pack trail and north of wagon road to Walkers Fork along the north ridge of Poker creek. The B.M. is about halfway up the hill where the wagon road turns on this ridge.
P. 272	491-2769	4,239-0571	Iron post is planted in the ground with a cairn of rock built around it, and is situated 15 ft. north of the Boundary monument at station G, 141 st. Meridian.
Base of Monu- ment 'G'		4,238-0001	
Top of Monu- ment 'G'		4,240-1491	

